

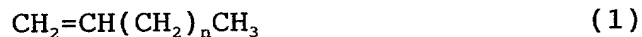
What Is Claimed Is:

1. A heat-softening heat-radiation sheet comprising a polyolefin-based heat-conductive composition which comprises a polyolefin and a heat-conductive filler, has a softening point of 40°C or above, has a thermal conductivity of 1.0 W/mK or higher, has a viscosity at 80°C of from 1×10^2 to 1×10^5 Pa·s and has a plasticity at 25°C in the range of from 100 to 700.

2. The heat-softening heat-radiation sheet according to claim 1, wherein said polyolefin is a polyolefin comprising an α -olefin polymer and having a softening point of from 40°C to 120°C.

3. The heat-softening heat-radiation sheet according to claim 1, wherein said polyolefin comprises an α -olefin polymer, an ethylene/ α -olefin copolymer and an ethylene/ α -olefin/non-conjugated polyene random copolymer.

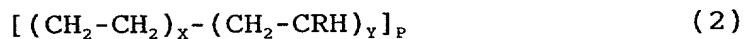
4. The heat-softening heat-radiation sheet according to claim 1, wherein said polyolefin comprises an α -olefin represented by the general formula (1):



wherein n is an integer of 16 to 50.

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5. The heat-softening heat-radiation sheet according to claim 3, wherein said ethylene/ α -olefin copolymer is represented by the general formula (2):



wherein R is an alkyl group represented by $-\text{C}_n\text{H}_{2n+1}$ where n is an positive integer; and X, Y, and P are positive integers;

and having a viscosity at 25°C in the range of from 200 cSt to 1,000,000 cSt.

6. The heat-softening heat-radiation sheet according to
5 claim 3, wherein said ethylene/ α -olefin/non-conjugated polyene
random copolymer has a Mooney viscosity (JIS K 6395) at 100°C
in the range of from 5 to 50.

7. The heat-softening heat-radiation sheet according to
10 claim 2, wherein said α -olefin polymer is derived from two or
more α -olefins having a different number of carbon atoms.

8. The heat-softening heat-radiation sheet according to
15 claim 3, wherein said ethylene/ α -olefin copolymer is a mixture
of two or more ethylene/ α -olefin copolymers having different
viscosities at 25°C.

9. The heat-softening heat-radiation sheet according to
20 claim 3, wherein said ethylene/ α -olefin/non-conjugated polyene
random copolymer is a mixture of two or more
ethylene/ α -olefin/non-conjugated polyene random copolymers
having different ethylene contents.

10. The heat-softening heat-radiation sheet according to
25 claim 1, wherein said heat-conductive filler is selected from
the group consisting of a metal, an inorganic oxide and an
inorganic nitride.